

The Syllabic Sign *we* and an Apologia for Delayed Decipherment

MARC ZENDER¹

Tulane University

DMITRI BELIAEV

Russian State University for the Humanities

ALBERT DAVLETSHIN

Russian State University for the Humanities

The principle aim of this paper is to present the evidence behind our identification of the phonetic sign *we*, and to trace some key implications of that decipherment.² Additionally, however, it is our apologia—that is, our explanation and justification of this strangely delayed discovery, now only entering the scene some six decades after Yuri Knorozov (1952) initiated the phonetic decipherment of Maya writing. It seems an explanation may be necessary since, as J. Eric S. Thompson observed just seven years after Knorozov's first publication, "if his readings are correct, the rate of decipherment should have accelerated astonishingly, for, as with a code, each new phonetic reading makes solution of the remainder easier" (Thompson 1959:362). Thompson repeated this criticism in his *Catalog of Maya Hieroglyphs* (1962:28), and once again in the third edition of *Maya Hieroglyphic Writing* (1971:vi). Each time, or so it seemed to Thompson, the still-incomplete Maya syllabary provided eloquent evidence that Knorozov's decipherment was unworkable. We needn't wonder, then, what Thompson would have made of this addition to the Classic Maya syllabary, which still contains significant gaps some forty-five years after his final rejoinder.

And yet, this criticism has always been an unjust one. Maya writing is no "code," but rather a visually complex logosyllabic script of hundreds of signs that underwent numerous changes during almost two thousand years of use. Further, Thompson reveals more than a little linguistic naïveté when he chides Knorozov for "read[ing] the glyph for dog as *tzul*, a rare term" when "it should be read *pek*, the common Yucatec word for dog" (Thompson 1959:362).³ One might as well argue that Old English *hund* "dog" should be absent from Anglo-Saxon manuscripts on the basis of the rarity and specialized meaning of *hound* in Modern English. And yet, *hound* (OE *hund*) is the original term for "dog," with a long Germanic ancestry (cf. German *Hund* "dog"), whereas *dog* (OE *docga*) is of uncertain origin and not attested before the late thirteenth century (Algeo and Butcher 2014:232-233).⁴ Similarly, lexical frequency in Modern Yucatec is simply not a reliable guide to the linguistic foundations of an ancient script, much less one that seems on present evidence to have recorded a pres-

tige form of ancestral Eastern Ch'olan (Houston et al. 2000).

In contrast to Thompson's frequently repeated assertion that the decipherment seems too long delayed for comfort, the aforementioned orthographic, paleographic, and linguistic complexities actually make it rather more likely that, as Stephen Houston (1988:126) suggests, "[t]he complete decipherment of Mayan glyphs is an event that neither we, nor perhaps our children, shall ever see." Specifically, as the senior author has had occasion to note elsewhere (Zender 2005a, 2005b, 2006b, 2014a), the difficulties inherent in maintaining a consistent visual separation of hundreds of distinct signs even as they underwent formal changes and influenced one another over some two thousand years will continue to ensure that numerous undeciphered signs remain "hidden in plain sight": routinely mistaken for other signs, even in the specialist literature, and therefore both misread and incorrectly cataloged. In this paper, we demonstrate through careful formal and contextual analysis that one such sign, long ago assumed to have been unmasked, has in fact been jealous of its real identity as the phonetic syllable *we*. Yet we also provide an apologia for delayed decipherment by exploring how the *we* sign—due to its pronounced visual similarities with T87 *TE'* and T61, 62, 65, and 339 *yu*⁵—came to be visually

¹ Corresponding author (mzender@tulane.edu).

² The *we* syllable was independently recognized by Zender and Beliaev, and all three authors have contributed to this paper. An early draft of this manuscript was circulated to fellow epigraphers (Zender 2014b) and presented in two public meetings (Zender and Stuart 2015; Zender 2015). We wish to acknowledge valuable comments from Stephen Houston, Simon Martin, David Stuart, and our anonymous reviewers. Beliaev and Davletshin's work was supported by the Russian Science Foundation (project no. 15-18-30045).

³ In a critical but cogent review of Thompson's *Maya Hieroglyphic Writing* (1962), the linguist Archibald A. Hill (1952:184) noted with respect to similar statements that "Thompson is first of all unaware that his problem is essentially a linguistic one, and is moreover naively ethnocentric in his linguistic statements."

⁴ See also "dog, n.1" and "hound, n.1," *Oxford English Dictionary*, 2nd ed., 1989 (*OED Online*: dictionary.oed.com).

⁵ T-numbers refer to Thompson's *Catalog* (1962).

5-HIX-K'IN *7-SAK-SIJOOM chu-ku-ja ba-wa-WAY-bi u-KAB-ji-ya AJ-CHAK-ma-xi
ho' hix k'in huk saksijoom chu[h]k[aj] ba[ah] way[i]b ukabjiiy aj chak maax
 "(On the) day 5 Ix 7 Zac, Baah Wayib was captured by Aj Chak Maax

3-la-ta na-wa-ja u-BAAK-ki ti-ya-AJAW
ux la[h]t na[']waj ubaak tiyajaw
 (and) three days later his captives were presented to his lord."

Table 1. The Kimbell Panel, main text.

confused with these other signs by ancient scribes and, as a result, mistakenly equated with them by modern scholars.

"The Sun God Fills the Sky"

We begin our discussion of the **we** sign with an unprovenanced panel in the collections of the Kimbell Art Museum (Figure 1). The panel was purchased by the museum from a New York collector in 1971 and is difficult to trace prior to 1970. Nonetheless, Peter Mathews (1997:243; see also Mayer 1984:28-30) was able to demonstrate, on the basis of carving style and epigraphic content, that the panel originally came from the site of "Laxtunich," somewhere in the vicinity of Yaxchilan. The site was named by Dana and Ginger Lamb, who first explored it in the 1940s (Lamb and Lamb 1951). Although details of the site's discovery and location remain unclear, our understanding of the epigraphic and iconographic content of the Kimbell Panel is well advanced, benefiting from historical and political connections to the comparatively well-documented site of Yaxchilan and from more than three decades of study by scholars (Schele and Miller 1986:226; Schele and Freidel 1990:287; Martin and Grube 2000:135; Miller and Martin 2004:30). Dated to August 24 and 27, AD 783, the scene depicts a seated Itzamnaaj Bahlam IV, ruler of Yaxchilan between ca. 769–800 (Martin and Grube 2000:124), as he receives three evidently hapless captives from the standing figure, identified as Aj Chak Maax, a local lieutenant (*sajal*) of the king.

The monument contains captions for all of the depicted individuals, including an inventive reversed text on the throne beneath the king, sharing his orientation and giving his names and titles. There is also a sculptor's signature informing us that the panel was carved by one Mayuy Ti' Chuween of K'ina', who also signed Laxtunich Panel 4, which was photographed at the site by the Lambs (see Mayer 1995:Pl. 121). Finally, there is

a main text providing a concise explanation of the scene (Table 1).

Evidently, Aj Chak Maax had taken these captives in a military engagement on August 24, 783. All of them are otherwise unknown, probably hailing from smaller sites in the vicinity of Laxtunich (the principle captive, Baah Wayib, is said to be from a place named Chok Te'el Naah). Then, three days later, he brought them before his overlord as a gift, the presentation most likely taking place in a sumptuous throne room at Yaxchilan itself.

Let's turn now to the reversed caption text beneath the king (Table 2). Although Itzamnaaj Bahlam IV's regnal name is not present, the inclusion of his pre-accession name, customary captor title, and the twin emblem glyphs of Yaxchilan leave no doubt about his identification (Schele and Miller 1986:226). This needs to be highlighted, for although previous scholarship has accepted this panel as a depiction of Itzamnaaj Bahlam IV, and the **che-le-wa CHAN-na K'IN-ni-chi** spelling as a version of his pre-accession name (Figure 2a), there has previously been no satisfactory explanation for the otherwise unique T130 **wa** sign in the first glyph block.⁶

This use of T130 **wa** is significant because all of the spellings at Yaxchilan of this king's pre-accession name

⁶ One of our reviewers suggests that the reversed text may have introduced complications into the rendering of this sign, making it merely resemble T130 **wa**. Indeed, we have considered this explanation for the divergent spelling, not least given several indications that the sculptor may have been unfamiliar with reversed texts. Note, for instance, that two of the signs in the caption have not been reversed (**chi** and the second instance of **AJAW**), unlike the other eighteen signs. That said, neither of these signs was corrupted, and there is every indication that Mayuy Ti' Chuween was otherwise fully in control of his oeuvre, as indicated by his use of novel but perfectly legible sign combinations for **K'IN-ni-chi** and **u-cha-nu**. Further, comparison of the **wa** syllable in the **che-le-wa** spelling with those in the *na'waj* verb and the two instances of Baah Wayib reveal consistent and deliberate details that lend confidence to our identification.

che-le-wa CHAN-na K'IN-ni-chi u-cha-nu TAJ-MO' K'UH-PA'-CHAN-AJAW K'UH-?KAAJ-AJAW
cheleew chan k'inich ucha'n taj mo' k'uh[ul] pa'chan ajaw k'uh[ul] kaaj ajaw
 "He is Cheleew Chan K'inich, Captor of Taj Mo', Divine Lord of Pa'chan and Kaaj(?)."

Table 2. The Kimbell Panel, text beneath ruler.

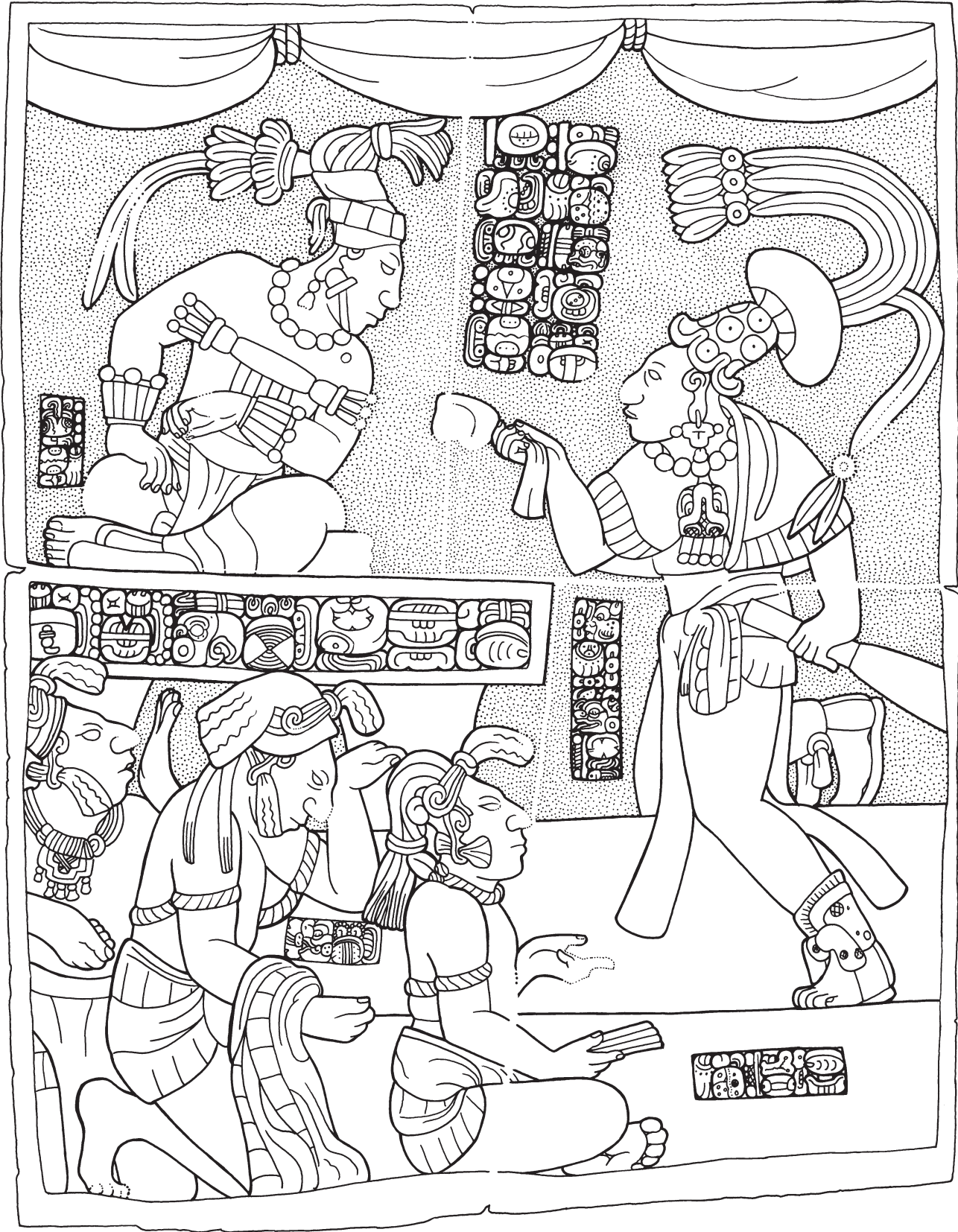


Figure 1. Unprovenanced panel from the Yaxchilan Region. Kimbell Art Museum, Fort Worth, Texas, AP 1971.07 (drawing by Marc Zender after a photograph by Justin Kerr in Miller and Martin 2004:31, Pl. 2).

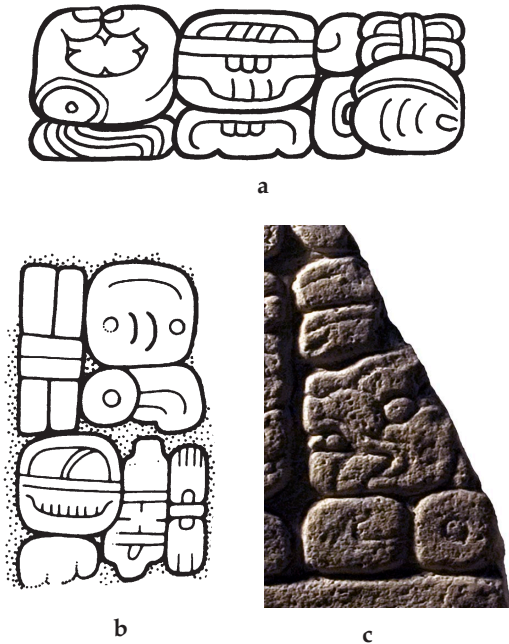


Figure 2. Various spellings of the pre-accession name of Itzamnaaj Bahlam IV: (a) **che-le-wa CHAN-na K'IN-ni-chi**, Kimbell Panel (drawing by Marc Zender); (b) **che-le-we CHAN-na K'INICH**, Yaxchilan Lintel 58, E1-E2 (drawing by Ian Graham © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, PM# 2004.15.6.6.32); (c) **che-le-we ...**, Yaxchilan Stela 4, back, fragment G (photograph courtesy of Carlos Pallan).

instead employ a previously-unrecognized mystery sign which has long been confused with T87 **TE'** (Figure 2b-c). We can trace the onset of this confusion to Tatiana Proskouriakoff (1964:190), who transliterated the initial portion of the pre-accession name as T145.188.87 (i.e., as **che-le-TE'**), and illustrated **TE'** as the final element in three distinct contexts (Figure 3). Contrast Ian Graham's more deliberate renderings of the first two passages for the Corpus of Maya Hieroglyphic Inscriptions (Figure 4). Note that, while the sign in question is

surely reminiscent of **TE'** in having two distinct components—one of them round with an inset circle, like a body-part marker, the other more oblong, with a line bisecting its length—the identity is not exact. Notably absent are the “globules of resin” (Stone and Zender 2011:171) which serve as a diagnostic element of **TE'** “wood” signs in Maya art and writing. And note that the bisecting line in the mystery sign (Figures 2b-c and 4) has a hook-like termination that does not appear on **TE'**. That said, the outlines and even some of the internal details of the two signs are very similar, and the “globules of resin” (on **TE'**) and the hook-like element (on the mystery sign) are clearly the main diagnostic features. In eroded contexts the signs are practically indistinguishable from one another, which helps to account for occasional examples of one sign being drawn in lieu of the other.⁷ Indeed, given the propensity of similar signs to formally influence one another over time (Lacadena 1995:220-236), it's actually somewhat surprising that Yaxchilan's scribes were so consistent in distinguishing between these two very similar signs.

There is, however, one remarkable exception. On Yaxchilan Stela 21 (Figure 5), a very late monument most likely commissioned in the first decade of the ninth century, the pre-accession name does indeed seem to have been carved as **che-le-TE' CHAN-na-K'INICH**. This is a fragmentary monument, with a substantial amount of surface weathering, yet Morley's photograph supports the presence of the “globules of resin,” vindicating at least Proskouriakoff's third drawing (Figure 3c). It therefore seems likely that, despite the otherwise studied separation of these two signs, the late scribe or sculptor of Stela 21 has here borrowed the “globules” from the **TE'** sign and applied them to the mystery sign. Alternatively, the elements in the mystery sign may have been influenced by the presence of similar elements in the nearby **na** signs (at pG2 and pH3), with which it also seems to share a scalloped lower right corner. However precisely this happened, we hasten to add that this is one of the latest monuments at Yaxchilan and presently provides the only example known to us where the mystery sign has come to resemble **TE'** so closely.

Let us return to Tatiana Proskouriakoff's initial identification of the mystery sign as **TE'**, which now becomes easier to understand. Although Proskouriakoff did not offer a phonetic reading of the pre-accession name, her analysis is the ultimate source of the modern transcriptions Chel Te' Chan K'inich (Martin and Grube 2000:134), Chelte' Chan K'inich (Helmke 2010:7), and Cheleht Chan K'inich

⁷ For example, Nikolai Grube (in Martin and Grube 2000:134) illustrates the first glyph block of the pre-accession name on Yaxchilan Stela 7 (front, pD2-pD3) as **che-le-TE'**. And yet the final sign is in fact broken beyond recognition on the original monument (cf. Tate 1992:194, Fig. 89). In this case, it seems that Grube has merely reconstructed the expected **TE'** from other examples (e.g., Proskouriakoff 1964:190).

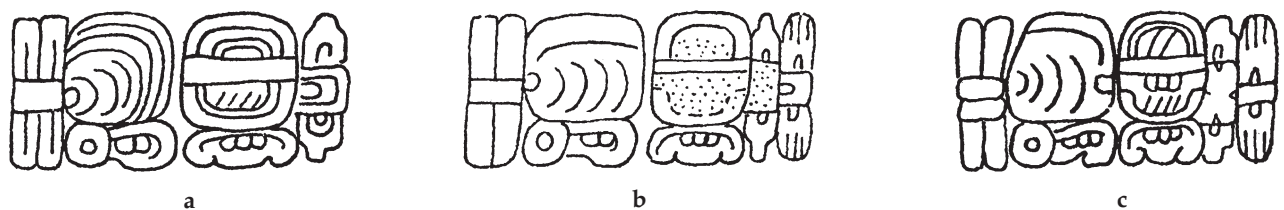


Figure 3. Tatiana Proskouriakoff's renderings of the pre-accession name of Itzamnaaj Bahlam IV: (a) Yaxchilan Lintel 2, J1-J2; (b) Yaxchilan Lintel 52, I2-I3; (c) Yaxchilan Stela 21, G3-H3 (Proskouriakoff 1964:Fig. 3).

(Lacadena and Wichmann 2004:141), to list only the most common. Unfortunately, all of these have proven impossible to translate satisfactorily, and equally difficult to reconcile with our increasingly mature understanding of Maya onomastics. As is now fairly well established, Classic Maya royal names are typically tripartite, grouping: (1) an initial verb, frequently an affective, or a transitive verb in the antipassive voice; (2) *chan* “sky,” and; (3) a theonym, such as K’awiil, Chahk, or K’inich (see Grube 2001, 2002; Colas 2004; Zender 2010, 2014c). Thus, to return to the Kimbell spelling (Figure 2a), **che-le-wa CHAN-na K’IN-ni-chi** can be transcribed as Cheleew Chan K’inich, and translated as “(The) Sun God Fills (the) Sky.”⁸ Now, the easiest way to reconcile this with the spellings at Yaxchilan would be to propose that the mystery sign is just an allograph of **wa**. As we will shortly discover, however, this runs afoul of the other settings of the sign, where **wa** yields little sense. Nor does the mystery sign substitute for **wa** in any other context. And, finally, we should try to explain the context of the mystery sign in such close proximity with **Ce** syllables. As David Stuart (2002a, 2008) has suggested, syllables of the shape **Ce**

⁸ The root *chel* is poorly attested in the relevant languages. The senior author suggests *chel* “to space or place evenly, spread out, fill” on the basis of Ch’orti’ *cher* “spread, space or place evenly,” *cherem* “dense, placed together,” and *cherem tun* “piled or covered with stones, stony all over” (Wisdom 1950:698-699; cf. Hull 2016:96), where Ch’orti’ *r* descends exclusively from earlier **l*. The Yucatec noun *chéel* “rainbow” (Bricker et al. 1998:68) might conceivably be related, inasmuch as it would have descended from Proto-Yukatekan **chehl*, whose form suggests a deverbal noun (in *-h-*) and a pre-Proto-Yukatekan verbal root **chel*. As descriptive terms for a rainbow, “spread thing” or “full thing” seem at least possible.

pA pB pC pD pE pF pG pH

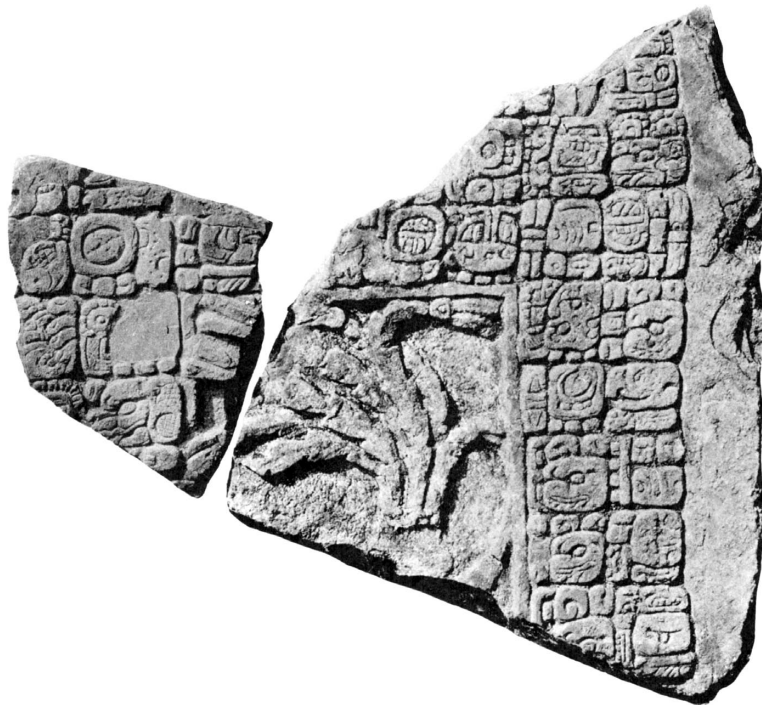


Figure 5. Yaxchilan Stela 21, with apparent TE’ sign in the pre-accession name of Itzamnaaj Bahlam IV, pG3 (Morley 1937-1938:Pl. 104b). Note similarities to **na** signs at pG2 and pH3. Glyph designations after Mathews (1997:Fig. 7.5).

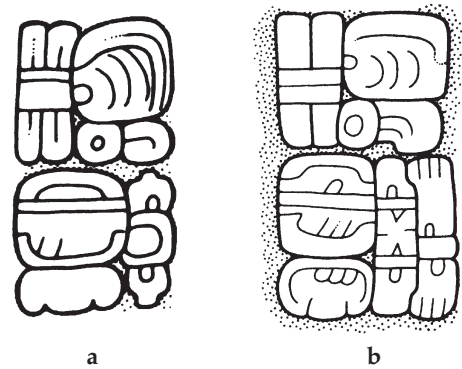


Figure 4. The pre-accession name of Itzamnaaj Bahlam IV: (a) Yaxchilan Lintel 2, J1-J2; (b) Yaxchilan Lintel 52, I2-I3. Drawings by Ian Graham © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, PM# 2004.15.6.5.2 and 2004.15.6.6.26.

and **Co**, being outside the framework of the **Ci**, **Ca**, and **Cu** signs employed to indicate vowel complexity (e.g., Houston et al. 2004; Lacadena and Wichmann 2004), tend to spell lexical roots and suffixes synharmonically. That is, all else being equal, **Ce** and **Co** syllables have a strong tendency to congregate with syllabic signs and logographs with which they share vowel quality. As such, given that the mystery sign follows **che** and **le** in the same glyph block and yet presumably provides at least final *-w* (given the **wa** on the Kimbell Panel), it seems at least worth considering that it had the phonetic shape **we**. If so, then all of the examples of the pre-accession name involving the mystery sign (Figures 2b-c, 3-5) should be transliterated as **che-le-we CHAN-na K’INICH** and transcribed as Cheleew Chan K’inich. The potential solution is an exciting one, inasmuch as it harmonizes the divergent Kimbell Panel spelling of this name with those found at Yaxchilan. Thankfully, there is also ample precedent for just this kind of orthographic variation in other royal names. Thus, in the inscriptions of Naranjo, while the antipassive verbal portion of the regnal name K’ahk’ Tiliw Chan Chahk is most commonly spelled **TIL-wi** (e.g., K4464, K7750, and NAR St. 21, front) or **ti-li-wi** (e.g., NAR St. 22, front), it also occasionally appears as **TIL-wa** (e.g., K2085) or **ti-li-wa** (e.g., K1398). Similarly, at Quirigua, the antipassive verbal portion of the regnal name K’ahk’ Jolow Chan Chahk is usually spelled **jo-lo-wo** (e.g., QRG Str. 1B-1, D1 and Q1), but it also occurs with final **-wi** (e.g., QRG St. I).

che-le-we CHAN-na-K'INICH K'UH-?KAAJ-AJAW K'UH-PA'-CHAN-AJAW yu-xu-lu CHAK-ka-la-TE'
chelew chan k'inich k'uh[ul] kaaj ajaw k'uh[ul] pa'chan ajaw yuxul chak kal te'
 "He is Chelew Chan K'inich, Divine Lord of Kaaj(?) and Pa'chan, (and) this is the carving of Chak Kal Te'."

Table 3. Metropolitan Lintel, main text.

Given these parallels, we may contemplate either that **che-le-wa** and **che-le-we** are in free variation as spellings of *chelew*, or, more interesting, that earlier *cheleew* (with a $-VV_1w$ antipassive suffix of CVC root transitives) had already lost or was beginning to lose its long vowel and had either already developed or was still developing into $-V_1w$. The spellings we have just considered all belong to the names of broadly contemporary Late Classic Maya rulers of the eighth and early ninth centuries AD, in a period neatly corresponding to Houston et al's (2004:91-92) "synharmonic turn" of ca. 750–850, during which period various lexemes and morphemes previously spelled disharmonically shifted to synharmonic representation. As the same authors have noted, such a shift might "indicate one of two things: (1) a sound change from complex to simple vowels, as expected by Ch'olan linguistic history [...]; or (2) an orthographic adjustment of a conservative or *retardataire* written language to correspond with patterns in spoken language" (Houston et al. 2004:97). The **che-le-wa** and **che-le-we** spellings do not in themselves resolve these two possibilities, but they do provide welcome additional data and suggest a spatial dimension to some of these orthographic and phonetic developments. In the capital, as we have seen, Itzamnaaj Bahlam IV's pre-accession name was always written with **we**, whereas at the subordinate center of Laxtunich—possibly to be equated with Tecolote, a fortified eighth-century site on Yaxchilan's northern border—it was written with **wa**.⁹ Cross-linguistically, sound changes (such as loss of long vowels) tend to radiate outward from high-status centers of innovation (*focal areas*), in waves which attenuate with distance, occasionally failing to reach *relic areas* which frequently preserve older forms (Hock 1991:432-444). It is intriguing to speculate that **che-le-wa** (*cheleew*) and **che-le-we** (*chelew*) appear in contemporary texts from the periphery and core, respectively, because they represent an *apparent time* sound change which is in progress or complete at Yaxchilan but which has not yet begun or has not yet reached completion at Laxtunich (see Nevalainen 2015:263-265). Additional examples would be needed to test this possibility, but it is exciting that Maya epigraphy and Mayan historical linguistics have developed to the point where we can begin to consider such intriguing historical sociolinguistic questions.

What we need at this juncture is a text from the hand

of a single scribe (or sculptor) showing the clear visual separation of the putative **we** syllable from both T87 **TE'** and T61, 62, 65, and 339 **yu** (with which, as we will shortly see, it is also frequently confused).¹⁰ Thankfully, we have just such a text in the exquisite painted lintel in the collections of the Metropolitan Museum of Art (Figure 6). Although unprovenanced, epigraphic and stylistic considerations indicate that this masterwork was commissioned sometime between 769–800, and that it came from La Pasadita, yet another fortified center on Yaxchilan's northern border (Doyle 2015).¹¹ Thus, the

⁹ Laxtunich Panels 3 and 4 (both in private collections) likely also record **che-le-wa**, although this is difficult to confirm given the poor quality of available photographs. If so, then **che-le-wa** probably represents a localism. As noted above, the Kimbell Panel and Laxtunich Panel 4 were both signed by the same sculptor, Mayuy Ti' Chuween, of K'ina'. And although we do not know the location of K'ina', other references associate it with Piedras Negras, suggesting that Laxtunich was situated somewhere between this center and Yaxchilan (Guenter and Zender 1999; Martin and Grube 2000:146, n.10, 172-173, n.74; Zender 2002:170-176, 2004:300, n.115). One candidate for Laxtunich is Tecolote (Martin and Grube 2008:135), a fortified eighth-century site on the northern border of Yaxchilan investigated by Charles Golden and Andrew Scherer; its architecture emulates that of nearby Yaxchilan, and it is situated only 5 km from La Pasadita, a known Yaxchilan client (Golden et al. 2005; Golden and Scherer 2006; Scherer and Golden 2009).

¹⁰ Thompson (1962) provides a confusing set of designations for **yu**, but only because the sign exhibits such profound formal variation, with distinct Early Classic, Late Classic, and Postclassic forms (Lacadena 1995:209-219), and with occasional graphic abbreviations. Thus, Thompson's T65 is just the Early Classic form of **yu**, T61 the Late Classic form, T62 the Postclassic form (Thompson's only examples come from the Madrid Codex), and T339 the graphically abbreviated forms. Henceforth, where we write **yu**, it should be understood as encompassing T61, 62, 65, and 339.

¹¹ Ian Graham visited La Pasadita in 1971 and was able to source two looted lintels to La Pasadita Structure 1 on the basis of their saw-marks, dimensions, and stone color (Ian Graham, personal communication 2005; see also Adamson 1975:249-259; Simpson 1976:104; Graham 2010:461). The first is now in the Ethnologisches Museum, Berlin (IV Ca 45530); it depicts the La Pasadita *sajal* Tiloom presenting his captive—T'uhl Chihk, prince of Piedras Negras—to his overlord Bird Jaguar IV in 759. The second is now in the Museum Volkenkunde, Leiden (3939-1); it also depicts Tiloom, this time casting incense with Bird Jaguar IV in 766. Since the Metropolitan Lintel also depicts Tiloom, albeit this time with Itzamnaaj Bahlam IV (r. ca. 769–800), we follow Doyle's (2015) suggestions for its age and origin. More recently, La Pasadita has been the subject of archaeological investigations by Charles Golden and Andrew Scherer, who have documented its fortifications and clear architectural ties to Yaxchilan (e.g., Golden et al. 2005).



Figure 6. Unprovenanced panel from La Pasadita, Guatemala. Metropolitan Museum of Art, New York, Michael Rockefeller Memorial Collection, bequest of Nelson A. Rockefeller, 1979.206.1047, www.metmuseum.org.

lintel depicts Tiloom, known to have been the *sajal* of La Pasadita between at least 759–771, as he and one other (unnamed) individual present offerings to Itzamnaaj Bahlam IV, who sits cross-legged in regal splendor on a decorated throne. Indeed, the scene possibly celebrates an heir apparenity rite for Itzamnaaj Bahlam IV, if not his actual coronation in ca. 768–769. Be that as it may, the

lintel is undated, and the only texts are a short caption between Tiloom and the king—**ti-lo-ma sa-ja-la**, *tiloom sajal*, “He is Tiloom, the *sajal*”—and the slightly longer main text of six larger glyphs above the king (Figure 7 and Table 3).

It is a welcome development to have such an accomplished text from a single hand that nonetheless includes



Figure 7. Detail of the main text on the Metropolitan Lintel. Metropolitan Museum of Art, New York, Michael Rockefeller Memorial Collection, bequest of Nelson A. Rockefeller, 1979.206.1047, www.metmuseum.org.

three signs that are often visually confused.¹² Note how Chak Kal Te' has carefully distinguished between the signs for **we**, **yu**, and **TE'**. Although all three signs share a disc with medial circle and one or more oblong projections, Chak Kal Te' has included diagnostic elements that nonetheless separate the three signs. The **we** sign carries its distinctive hook, which is slightly more angular than the curved lines in the projections flanking the central disc of **yu**. When **yu** is graphically abbreviated

to just the disc and one projection, as we will see, it is really only this curvature that distinguishes **yu** from **we**, and occasionally, as we have already seen with **TE'**, this distinction in fact vanishes, leaving virtually no difference in the depiction of these two signs. On Chak Kal Te's masterpiece, however, only the **TE'** sign carries the "globules of resin," visually distinguishing it from both **we** and **yu**. Moving forward, we presume that Chak Kal Te' knew his craft, and we take the distinctions he made between these signs on the Metropolitan Lintel as canonical, at least for the late eighth century Usumacinta region.

To return briefly to the historical sociolinguistic question broached above, it's fascinating to note that Chak Kal Te' spells the pre-accession name of his king **che-le-we**—just as it is consistently spelled at the capital—but distinct from the **che-le-wa** spelling employed by Mayuy Ti' Chuween at Laxtunich/Tecolote. Although La Pasadita and Tecolote are roughly equidistant from Yaxchilan (about 17 km), there are nonetheless some indications that La Pasadita had somewhat stronger connections with the capital (Golden et al. 2005), and recall that Tiloom served both Bird Jaguar IV and his son Itzamnaaj Bahlam IV and may therefore have been familiar with the latter when he had not yet taken his regnal name and was still known only as Chelew Chan K'inich. Alternatively, if we consider that monumental orthography was a sculptor's prerogative, reflecting either his own pronunciation or the preferred pronunciation or orthographic conventions of the workshop where he was trained, Chak Kal Te' may well have stud-

¹² As Doyle (2015) has noted, this clearly accomplished sculptor, known only as Chak Kal Te', carved at least one other lintel depicting Tiloom, dated to 771. Still unpublished, it resides in a private collection in Holland (Graham 2010:452-467). As one exercise in understanding what we have lost, it is worthwhile to speculate what the lifetime production of a master sculptor like Chak Kal Te' would have been, both in stone and wood, and yet we have only two affirmed works by his hand. As René Derolez (in Page 1991:17) has observed with respect to Anglo-Saxon runes, "incising runes may not have been a very common skill, so let us assume that there were on average only ten 'rune-masters' ... active at any given time, and that they produced each only two inscriptions a year on durable materials ... Even on such a minimalistic estimate they must have produced 2,000 inscriptions in every century. ... The inscriptions found so far will then amount to less than one percent of that total—a sobering thought, and one that ought to render any implicit or explicit argument from silence highly suspect." And this is to say nothing of their potential output on perishable media. Such studies as we have of Classic Maya sculptors (e.g., Davoust 1994; Montgomery 1995, 1997; Houston 2012, 2013; Houston et al. 2015; Martin et al. 2015) indicate that there may have been as many as ten contemporary sculptors at every major center, suggesting that these sobering statistics and their implications are equally relevant to Maya epigraphy.

ied at Yaxchilan, whereas Mayuy Ti' Chuween presumably studied at K'ina' (wherever precisely that was). In any case, it may well be significant, assuming our reconstruction of the historical development from $-VV_1w$ to $-V_1w$ is correct, that La Pasadita has adopted either the innovative **che-le-we** orthography or the innovative $-V_1w$ pronunciation of the Yaxchilan court, while Laxtunich/Tecolote has retained the more conservative **che-le-wa** or $-VV_1w$. Again, additional examples (and more isoglosses) will be needed to test these possibilities—not least given the significant issues of statistical sampling noted earlier (see footnote 12)—but there are clearly prospects here for the mapping of historical sociolinguistic variations and their correlation with political affiliation, ethnicity, and other cultural variables.

“He Stepped on the Causeway”

Let us turn now to the appearance of the putative **we** sign in other contexts, beginning with a particularly telling example on an incised alabaster bowl from the La Florida valley, Honduras (Figure 8).¹³ The text opens with the Calendar Round 7 Edznab 11 Yax (A-B), convincingly placed by Berthold Riese (1984:14) at 9.17.4.10.18, or August 10, AD 775. Immediately following this we find three verbal phrases (C-F, G-I, and J-L) before we come to the subject of this lengthy sentence, identified as the ruler Yax Pasaj Chan Yopat of Copan (M-R), who reigned from c. 763–810 (Martin and Grube 2000:206). The first verbal phrase (C-F) is slightly problematic, since there are several weathered and uncertain signs, but we can make out its basic structure as **u-Ca-ba-wa i-tz'i-ni TE' ta-ji**, *uCabaw itz'in te' [itz'in] taaj*, “he ...ed the junior stick(s) (and) [junior] obsidian(s).”¹⁴ The verb is clearly an active root transitive declarative (likely with unmarked aspect), and although of uncertain meaning—owing in large part to the still-undeciphered **Ca** syllable—its direct objects are the “junior trees and junior obsidians.” This is almost certainly a reference to members of a ranked ritual order of priest-scribes (*itz'iin taaj* and *sakuun taaj*) only recently identified by David Stuart and Franco Rossi in the mural paintings of Structure 10K-2 at Xultun, Guatemala (Saturno et al. 2015). The implication here is that Yax Pasaj was associated with a similar group of priest-scribes, whose residences were perhaps located in El Abra and/or Los Higos, two key Copan-affiliated sites in the La Florida valley (Canuto and Bell 2008).

The second verbal phrase (G-I) is much clearer, and can be read as **u-te-k'e-we bi TUUN-ni**, *utek'ew bi[h] tuun*, “he stepped on the causeway.”¹⁵ The sign below **te-k'e** (at G) has long been interpreted as a graphically abbreviated **yu** (strikingly similar to a bona fide **yu** on YAX St. 12, C3), particularly given the pronounced curvature of the line in its oblong element. But **yu** makes no sense in this context, and the close association with two **Ce** syllables, as discussed above, rather suggests **we**. In construction, the verb is another active root transitive declarative, though here in a unique synharmonic construction for the $-V_1w$ ending. As Robert Wald (1994) has demonstrated, this inflectional morpheme is more typically written with syllabic **wa** regardless of the identity of the root vowel, leading to some debate as to whether it would be best represented as $-VV_1w$, $-V_1'w$, or simply $-V_1w$ (Houston et al. 2000, 2004; Lacadena and Wichmann 2004). We cannot resolve this debate here, but we can contribute the observation that the

¹³ According to Berthold Riese (1984:13), citing a personal communication from Ricardo Agurcia, “the alabaster bowl was discovered by a farmer in a significant group of ruins in marshy terrain near La Florida, Departamento de Copán, Honduras. It is said to have been found in a hoard with other vessels, including some of Copador type” (translation from the German).

¹⁴ One of us (Zender 2014d:7-8) has noted several precedents for this kind of non-contiguous haplographic abbreviation, where although *itz'in* (D) is written but once, it was likely intended to modify both *te'* (E) and *taaj* (F), as in similar diphthastic expressions such as 3-9-**CHAHK-ki** for *uhx chahk baluun [chahk]* “three rain gods (and) nine [rain gods]” (DO Panel, pC1 and pM1), and **TE'-TOOK'-BAAH-ja** for *te' baah[al] took' [baahaj]*, “wooden image (and) flint [image]” (CRN HS2, Block XI, pA1). Such abbreviations are far more common in the Classic Maya script than has been generally recognized (see also Houston and Martin 2011).

¹⁵ There can be little doubt that this reflects Proto-Ch'olan **tek'* “to step on, stand upon, kick” (Kaufman and Norman 1984:132; for Ch'orti' nuances see also Hull 2016:400). *Tek'* is a CVC-root transitive in both Ch'olan and Tzeltalan languages (Kaufman 2003:1420). Other epigraphic contexts are supportive. Thus, on the DO Panel from Palenque (D3-E3) we have the Classic Ch'olti'an passivization **te-k'a-ja yo-OOK tu-WITZ-li u-K'UH-li**, *tel[h]k'aj yook tuwitzil uk'uh[uu]*, “his legs were set upon the mountain of his god(s),” in reference to a child's induction into ritual practice (perhaps with assistance?). Similarly, on Dresden 8c, accompanying a scene of God D climbing temple steps, we have **u-te-k'a-ja NAAH-hi ITZAM-na-?**, *utek'aj naah itzamna ...*, “Itzamna ... stepped in the house,” reflecting a Yukatekan completive root transitive in *-aj* (Hofling 2006:373-376, Table 3). For *bihutuun* as “causeway (lit. road of stone)” see Stuart (2007) and Martin (2015).



Figure 8. The text on an alabaster bowl from the La Florida valley, Honduras (drawing by Linda Schele and Mark Van Stone, SD-1041; slightly amended by Marc Zender based on photographs by Schele, research.famsi.org/schele_photos.html, #s 64051-64060).

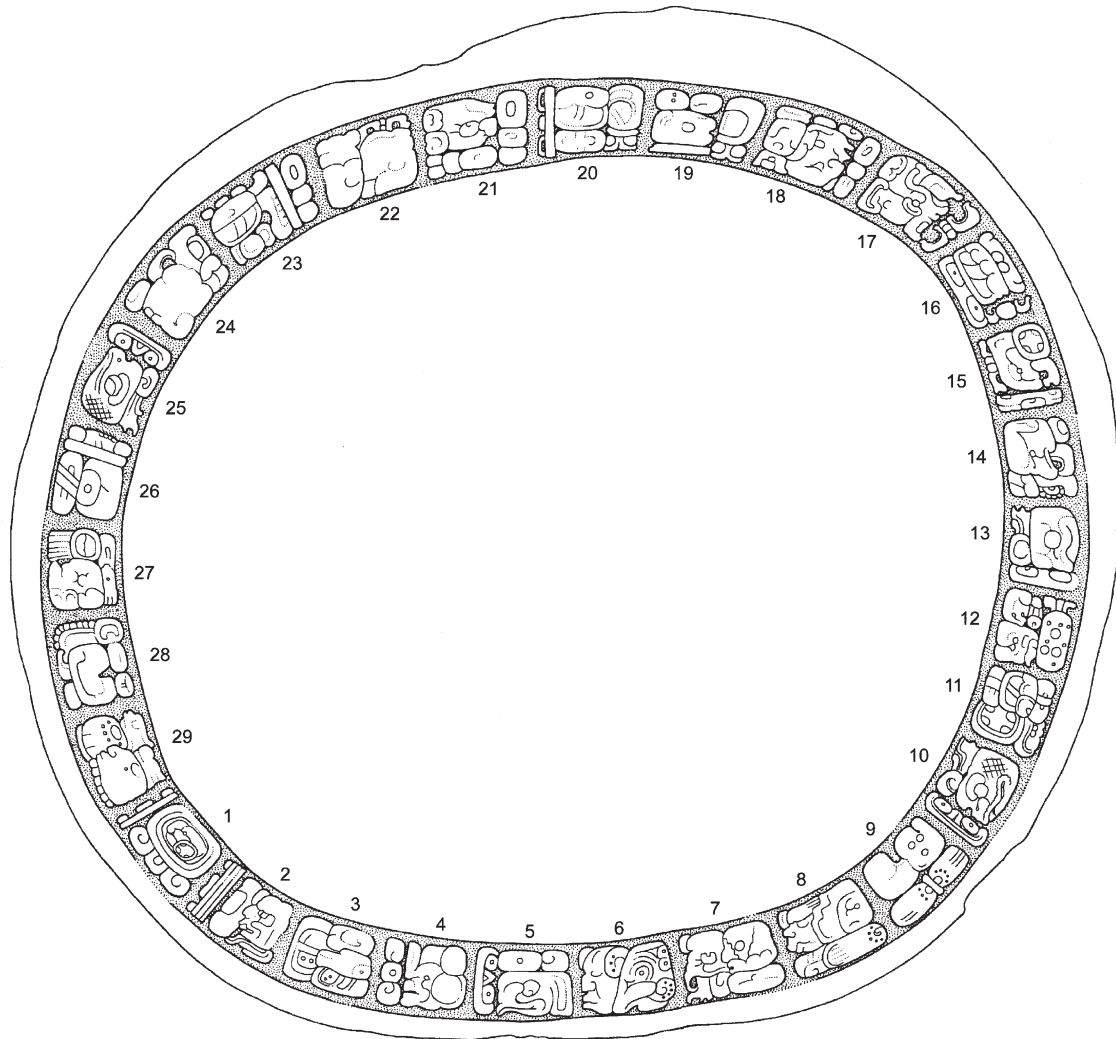


Figure 9. Unprovenanced drum altar from the Yaxchilan region. Fundación La Ruta Maya, Guatemala (drawing by Nikolai Grube, after Grube and Luín 2014:Fig. 4).

synharmonic spelling of this verb—and probably the still-undeciphered verb (at C) as well—is most likely motivated by the late eighth-century context, during the aforementioned synharmonic era (Houston et al. 2004). For one thing, note that *itz'in* (D) and *yopat* (P) are also written synharmonically. For another, as Houston et al. (2004:91-92) have noted, Yax Pasaj's Copan Temple 11 inscriptions in fact provide some of the earliest documented synharmonic spellings in the corpus, precisely contemporary with the text on this alabaster bowl.

The text continues with the third verbal phrase (J-L) **AK'-ta ti-12-pa ta**, *ak'ta ti lajchan pata[n]*, "he danced with 12 (units of) tribute," before concluding with the names and titles of the king (M-R).¹⁶ Taken as a whole, then, the alabaster vase records that "on the day 7 Edz nab 11

Yax, Yax Pasaj Chan Yopat, Lord of Copan and *bahkab*, ...ed the junior sticks and junior obsidians, stepped on the causeway, and danced with twelve units of tribute." These interrelated and interdependent actions likely encompass Yax Pasaj Chan Yopaat's role as overlord and ritual supervisor to the *te'* and *taaj* officeholders acknowledged in the first verbal phrase. The king's tentative use of the causeway (perhaps in an official act of inauguration), and his dance with tribute items (perhaps clothing or jewelry provided to him for the event), probably served as public acknowledgements of the service labor and material goods provided to the Copan state by his clients in the La Florida valley. The alabaster vessel itself was almost certainly carved at Copan—given its fine calligraphy and precocious orthography in line with contemporary carving at the capital—and it may well have been gifted to Yax Pasaj's clients, both in recognition of their past service and as a material reminder of their socioeconomic obligations to the king.

¹⁶ See Stuart (1995:354-356; 2006:127-128) for *patan* as a generic term for tribute, whether goods or labor.

“His Thing for Tamale-Eating”

In 2014, Nikolai Grube and Camilo Luín published a remarkable drum altar in the collections of the Fundación La Ruta Maya, Guatemala (Figure 9). As they observed, the altar was evidently commissioned by Bird Jaguar IV on 9.16.13.5.9 7 Muluc 17 Yaxkin (glyphs 1-2)—i.e., June 19, AD 764—at least partially in honor of his father Itzamnaaj Bahlam III (r. 681–742), who is both named on the upper text and depicted on the side of the altar (see Grube and Luín 2014:Fig. 8 for details and discussion). For our purposes, however, it is the dedicatory phrase (at 3-8) that is most significant, for there we can read **i-K’AL-ja yu-xu-lu u-we-be na-li ya-? u-mu-MUHK-li**, *i k’a[h]l[aj] yuxul uwe[’]bnaal ya... umuhkil*, “then the carving of the altar of the ... of his burial was made/ adorned.”¹⁷ As Grube and Luín recognized, the owner of the burial (named at 9-14) was apparently the child of a woman (15-17) who had several other offspring (18, 19, 20, 21-22) including Itzamnaaj Bahlam III (23-29). Thus Bird Jaguar IV apparently dedicated this mortuary altar to his late paternal uncle. Note the potential **we** sign (5), this time immediately above the syllable **be** (Houston et al. 2006:243-250). Once again, it closely resembles a truncated **yu** sign, which is how it was interpreted by Grube and Luín (2014:41-42). However, as they readily admit, ***yu-be** is a decidedly uncouth spelling, and the search for relevant roots of the shape *-ub(eC)*, *-u’b*, or *-uub* comes up empty. On the other hand, **we-be** would be a straightforward synharmonic spelling in keeping with Stuart’s (2002a, 2008) principle.

We therefore interpret **u-we-be na-li**, *uwe[’]bnaal* as a reduced form of **uwe’ibaanaal* or **uwe’iba’naal*, analyzable as **u-we’-ib-a-oon-aal*. The first element clearly provides the third-person possessive. The second element is the intransitive verb root *we’* “to eat (tamales)” (Zender 2000:143). The third is the common *-ib* instrumental suffix, producing the now well-known Ch’olan term *we’ib* n. “plate, dish (lit. tamale-eating-instrument),” which appears on several tamale service plates during the Classic period (Zender 2000:1043; see also Boot 2003:3). The fourth element is most likely the Ch’olan *-a* causativizing suffix (MacLeod 1987:Fig. 12), producing **we’iba* “to use for the ingestion of tamales,” for which we have the Ch’ol cognate *we’iban* with the same meaning (Aulie and Aulie 1998:109).¹⁸ The fifth element is the Ch’olan *-oon* antipassive of derived and non-CVC-root transitives (Lacadena 2000; Zender 2010:13, n. 22), probably producing something like **we’ibaan* or **we’iba’n* “to tamale-eat,” where the impermissible *a-oo* contact likely led to progressive vowel harmony and either regressive quantity or the production of a glottal stop, assuming Ch’orti’ morphophonemics and some potential script parallels are reasonable guides here (Lacadena 2013:13-16, and example 4). Finally, the last element surely represents a *-VV,l* nominalizing suffix. At this point, then, we have either **we’ibaanaal* or **we’iba’naal*, meaning

“one’s thing for tamale-eating.” Note, however, that the syllabic weight of the final long vowel causes the stress to shift, leading to syncope of several unstressed vowels (*i* and *aa* or *a’*) and probably of one or both glottal stops (’), although weak consonants of this type are typically abbreviated in Maya writing anyway (Zender 1999:130-142; Lacadena and Zender 2001:2-3). In the final analysis, this leads us to *uwe[’]bnaal* “his thing for tamale-eating,” the form directly indicated by glyphic **u-we-be-na-li**.

Considered as a whole, then, the Classic Maya term for altar seems to have referred to a place where tamale plates or similar comestible offerings would have been gathered. This is strikingly reminiscent of both Classic iconography and modern ethnographical accounts. As Houston et al. (2006:122-127) have argued, Classic altars and offering bowls were primary locales for the feeding of gods and ancestors. They note that the altar to Copan Stela 13 contains a dedicatory text which records that “the food (*uwe’*) of the Sun God was fashioned here” (Houston et al. 2006:123, Fig. 21). Similarly, David Stuart (personal communication 2014) informs us of an unpublished miniature altar from Yaxchilan, with a possessed name tag likely reading either **u-TI’-bi-li**, *uti’bil* “his thing for eating meat” (cf. Tzeltal *ti’* “to eat flesh,” Berlin 1968:211) or **u-WE’-bi-li**, *uwe’bil* “his thing for eating tamales.”¹⁹ Classic Maya texts and iconography also indicate that human hearts were the principle food of the Sun God, but “the tamale was linked conceptually to the human heart” and “this organ or its symbolic substitutes may well have been the offering on the altar” (Houston et al. 2006:123). These observations resonate with ample references in the ethnographic literature to *mesas* as “eating places” for ancestors. Thus, as Bruce Love notes, *mesas* in contemporary Becanchen, Yucatán, are stacked with “cups of *báalche’*, cups of thick soup [known as *k’óol*], ... and piles of various classes of breads” (2012:129). Such “offerings and artifacts” were the means by which “humans and spirit beings alike would receive sustenance” (Love 2012:107). Although the Spanish borrowing *mesa* is now the term of art for of-

¹⁷ Grube and Luín (2014:48, n.1) have proposed *k’al* “make” on the basis of Ch’ol *k’äl* vt. “construir (casa)” (Aulie and Aulie 1998:20) and Ch’olti’ <cale> (*k’al-e*) “hacer” (Morán 1695:36). Another possibility would be *k’al* (later *ch’al*) “adorn, decorate,” as suggested by Ch’ol *ch’äl* vt. “to adorn something” (Hopkins et al. 2011:48) and Tzeltal *ch’al-el* vt. “adornar” (Slocum et al. 1999:36).

¹⁸ The *-n* in the Ch’ol form is not related to the *-n* in Classic *we[’]bnaal*, for it instead marks incompletive aspect in the greatly reorganized Ch’ol verbal paradigm.

¹⁹ Alexandre Tokovinine (personal communication 2015) kindly suggests to us that Río Amarillo Altar 1 may contain a relevant parallel in one of its dedicatory passages (at V1-U2), which possibly referred to the altar as a **we-be TUUN-ni**, *wel’b]tuun*, “eating stone.” The presence of **be** is certainly supportive but, as Tokovinine points out, the potential **we** sign is too eroded to be certain.

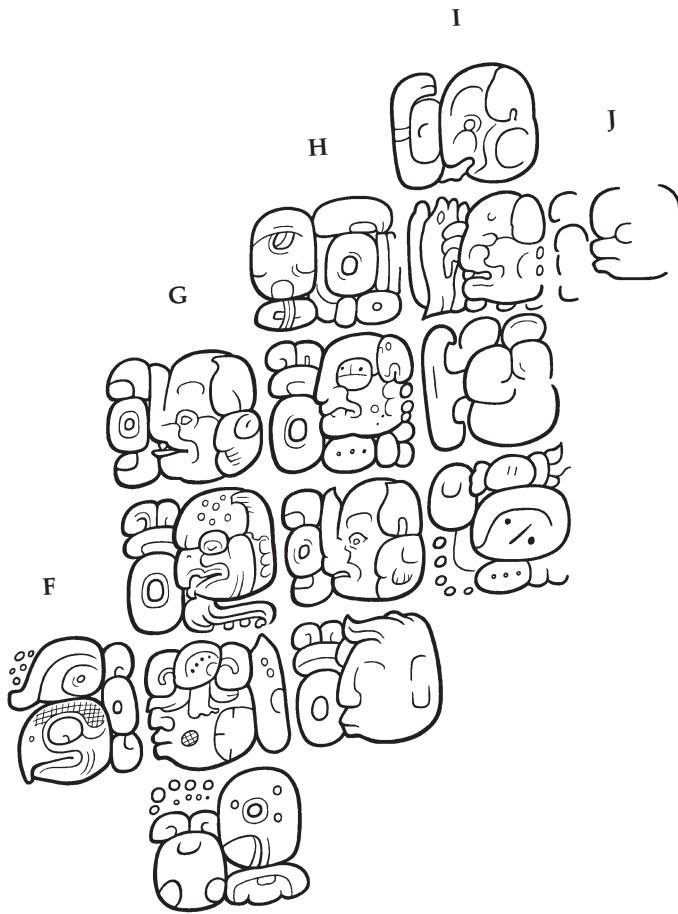


Figure 10. Incised text on Calakmul Stela 51, F1-J1 (drawing by Simon Martin, after 1932 photograph by Frances Morley; note that glyph designations here depart from those in Ruppert and Denison 1943:11).

fering tables in Ch'olan and Yukatekan languages, Colonial dictionaries still preserve older forms that are much more reminiscent of Classic *we'*)*bnaal*, such as Colonial Tzotzil *ve'ebal* "dining table" (Laughlin 1988:327) and Colonial Yucatec *wi'ileb che'* "mesa de comer" (Pío Pérez in Barrera Vásquez et al. 1980:923). This continuity in ritual practice and the terminology of offering tables is striking; moreover, it provides particularly strong evidence in support of the *we* decipherment.

"They Delivered Their Carvings"

Early last year, Martin et al. (2015) presented an insightful new analysis of the lengthy, well-executed sculptor's signature on Calakmul Stela 51 (Figure 10). As they demonstrate, the monument depicts the Calakmul king Yuknoom Took' K'awiil (r. AD 702–731). It was erected at the base of Structure I in 731 and was carved in a somewhat better, denser stone than other Calakmul monuments and "may have been imported to the site" (Martin et al. 2015:Note 2). This is essential background

to their analysis of the text, which, leaving the introductory verb (F1) to the side for the moment, clearly references two different individuals. The first is introduced by the possessed noun *yuxul* "his carving" (G1), followed by his name (G2–G3) and the titles *k'uhul 'chatahn' winik* (G4–H1) and *sak wahyis* (H2), both associating him with the region encompassing Calakmul and sites to the south as far as La Corona. The second individual is also introduced by *yuxul* (at H3), followed by his name (H4–I2), and several titles including the possible emblem glyph of Uxul (I3), *k'uhul sak wahyis* (I4) and an unclear element (J1). This analysis of the text is supported and extended by a near-duplicate sculptor's signature on Calakmul Stela 89. As the authors note:

The incised texts on Calakmul Stela 51 and 89 are conventional sculptor's signatures in a number of respects, but are unusual in two significant ways. First, they are the only ones to name major lords and indicate that they were personally responsible for the creation of the work. There are a few cases in which artisans carry high social position, but no others in which the governing elite of distant political centers are specified in this manner. We need not take this at face value, but instead consider the ways that these characters may have commissioned these two monuments and stand as symbolic or rhetorical producers—an adaptation of the normal function of signatures. (Martin et al. 2015)

Now let us return to the introductory verb (at F1). Martin et al. (2015) suggest the reading *ye-be-yu*, and suggest possible linkages to either Proto-Ch'olan *eb tv.* "to send/deliver, give" (from Proto-Mayan **ab tv.* "to send, give" per Kaufman 2003:58) or to Proto-Ch'olan **ye'-be* "to give something to someone" (Kaufman and Norman 1984:137), in which **-be* would have functioned as the applicative, marking an indirect object (see Kaufman and Norman 1984:139). As they observe:

... either verbal root would imply that the text on Stela 51 is a statement of gifting or tributary payment, and if this is so then this small inscription is a revealing statement about the relationship and obligations between Calakmul and two of its leading clients. (Martin et al. 2015)

The consideration that some monuments (perhaps not CLK St 51 and CLK 89 alone) were commissioned as gifts or tribute for overlords is an exciting one that deserves continued investigation elsewhere, including close attention to quality of stone, paleography, and sculpting style. Nonetheless, we concur with the authors' conclusions and only wish to take a closer look at the verb (F1).

The fact is that *ye-be-yu* is an awkward glyphic spelling. The authors admit as much when they note that "[t]he role of the terminal *yu* as a verbal suffix is unclear." Indeed, there are few precedents for this kind of spelling. (Tikal Lintel 2 of Temple IV, B11, is possibly comparable, inasmuch as the still-undeciphered T174var, denoting a verb root in some other contexts, is here followed by *-yu*, but it is by no means certain that it represents a

verb here.) Perhaps more importantly, there is no clear etymology for the resultant suffix, whether **-eyu(C)*, **-e'y*, or **-eey*. Orthographically speaking, however, and as we have now seen in several other contexts, the syllables **ye** and **be** strongly suggest that the final sign should also be a **Ce** syllable. In this case, we suggest **we**. True, this would be our first instance of a “full” **we** syllable with flanking oblong elements (it is likely not the only one), and there is no doubt that it even more closely resembles **yu** as a result. But we would argue that the signs still have a few distinguishing features. Note, for instance, that the tentative **we** (F1b) is much taller than it is wide and has only one medial circle in its central element, as well as curved bisecting lines in its oblong flanges that do not quite touch the sides. By contrast, the two certain **yu** signs (at G1a and H3a) are proportionally somewhat more squat, have a circle with additional ring in their central elements, and slightly more angular bisecting lines in their flanges that reach all the way to the left edge of the sign. Assuming that the sculptors of what Morley (1933:200) termed “the most beautiful monument at Calakmul” knew their business, it seems reasonable to propose that these differences, however slight, may have been intentional.

Be that as it may, we can now suggest **ye-be-we**, *yebew*, “they delivered them.” Instead of an obscure verbal formation, we have the familiar active root transitive declarative, albeit in a late synharmonic spelling probably reflecting $-V_1w$. As first suggested by Martin et al. (2015), the root likely reflects Proto-Ch’olan *eb tv*. “to send/deliver, give,” which in turn hails from Proto-Mayan **ab tv*. “to send, give” (Kaufman 2003:58). This is the same root that furnishes us with the derived Proto-Ch’olan noun **ebet* “messenger (i.e., one who delivers, gives)” (Kaufman and Norman 1984:119), and which likewise appears in the script in the spellings **ye-be-ta** and, somewhat later, **ye-be-te** (Houston et al. 2006:243-250). Given the usual syntax of transitive verbal phrases, we might have expected the inflected verb to be followed first by its direct objects (its patients) and then by its subject (the agent), but we would argue that this particular context presented unique challenges in the form of two sculptors each receiving more or less equal credit for the gift (though it might be noted that the order of the two sculptors is equivalent on both CLK 51 and 89). Put another way, the syntax of grammatical possession, where possessed nouns (G1 and H3) must be followed by their possessors (G2-H2 and H4-J1), effectively means that we are provided with the direct objects and agents simultaneously. As such, we can offer the following loose translation of the entire sentence, leaving out undeciphered, eroded, or uncertain elements, and reorganizing the syntax to comport with English: “Sak Ikin ..., *k’uhul ‘chatahn’ winik*, ..., *sak wahyis* (and) Tzahkaj Bahlam, *naahkuum ajaw*, *k’uhul sak wahyis* ..., delivered their carvings.”²⁰



Figure 11. Unprovenanced Codex-style vessel. Los Angeles County Museum of Art, Gift of the 2006 Collectors Committee, M.2006.41, www.lacma.org.

“Eight Thousand Pelts”

Our next context takes us to a well-known Codex-style vase in the collections of the Los Angeles County Museum of Art (Figure 11). Although unprovenanced, recent epigraphic, stylistic, and chemical analyses—both of archaeologically-recovered specimens and pieces in museum collections—indicate that such vessels were produced almost exclusively in the Mirador region of northern Guatemala, primarily at Nakbe, in the period between ca. AD 675–750 (Reents-Budet et al. 2010). This elegant masterwork depicts a rogues’ gallery of nightmarish *wahy* beings, including an enigmatic jaguar first identified by Nikolai Grube and Werner Nahm

²⁰ One of our reviewers, while acknowledging the general desirability of avoiding stilted phrasing by converting Mayan VOS syntax into English SOV syntax in translation, nonetheless asks us “to also provide an intermediate bridge between what was written and your translation.” We are happy to do so. If we translate loosely and track the original syntax we instead have something like: “They delivered them, the sculpture of Sak Ikin ..., *k’uhul ‘chatahn’ winik*, ..., and *sak wahyis* (and) the sculpture of Tzahkaj Bahlam, *naahkuum ajaw*, *k’uhul sak wahyis*, and ...”.



Figure 12. Detail of caption on the LACMA vase. Los Angeles County Museum of Art, Gift of the 2006 Collectors Committee, M.2006.41, www.lacma.org.

(1994:687-688).²¹ Despite what at first glance seems to be a rather active pose, however, the jaguar may well be deceased. His eyes are closed, his lips are pulled back to reveal several teeth, and his tongue emerges from his mouth. Moreover, his tail is humbly tucked forward between his legs, and he sports a large scarf knotted at the throat—an iconographic theme that has been linked to ritual beheadings (Stuart 2014).

The creature's caption appears in five glyph blocks which seem to float in front of his face, with the fourth block slightly overlapped by his muzzle (Figure 12). Grube and Nahm (1994:687) propose that the first two should be read as **K'IN-TAN-la BOLAY-yu*, *k'in tanal bolay*, "sun-stomach-jaguar," citing Proto-Cholan **bo'lay* "spotted; jaguar" and **tahn* "chest" (Kaufman and Norman 1984:Items 55, 504). We concur with various aspects of this reading, but it's clear to us that the first glyph block was damaged by the crack passing through it, and has most likely suffered repainting as a consequence. Rather than "a vase turned upside down with a *k'in* sign infixed" (Grube and Nahm 1994:687), we suggest that this was originally simply **K'IN-*ni**, as suggested by several glyphic parallels to be discussed presently.

As for the second glyph block, we are dubious about the **BOLAY** identification for several reasons.²² First, given our present understanding of Classic Maya orthography, *-yu* is an unlikely phonetic complement for *bo'lay*, which has no vowel complexity in its final syllable. Second, the T832 "headless jaguar" sign would be a strange choice of icon for *bo'lay*, a generic term which refers to all kinds of dangerous animals, including not only jaguars, but also jaguarundis, coyotes, foxes, and several types of venomous snakes (e.g., Barrera Vásquez et al. 1980:62, Hopkins et al. 2011:23-24). *Bo'lay* only gains specificity when it is prefixed by a color term, as in Ch'ol *k'ün bo'lay* "coyote" and *ik' bo'lay* "nauyaca" (Hopkins et al. 2011:23-24). To our knowledge, the T832 "headless

jaguar" is never prefixed by a color term. Third, we now have at least one Classic example of the term *bo'lay* on a Late Classic polychrome cylinder vase in the collections of the Fundación La Ruta Maya, Guatemala, where we find the captor title **u-CHAN-na SAK-bo-la-ya**, *uchan sakbol'lay*, "captor of Sak Bo'lay" (Musée du quai Branly 2011:170), and this further suggests that *-yu* would be an unlikely complement to a **BOLAY** logogram. Fourth, to the extent that we can trust the details on the LACMA vase, the sign below the "headless jaguar" more closely resembles **TE'** than it does **yu**. As we will shortly see, however, it is most likely none other than the **we** sign, here with the selfsame **TE'**-like infixes that we have already seen on Yaxchilan Stela 21.

The strange *wahy* character appears on a couple of other vases, and his name also features as an epithet of the Sun God in still other contexts. Of the eight additional examples of this name phrase that are known to us, we have culled five that are least eroded and yet also provide broad regional and chronological coverage (Figure 13).²³ We will examine these chronologically, tracing both spelling variations and the paleographic development of the **we** sign. Erected in AD 488, Tikal Stela 3 provides our earliest example (Figure 13a). Despite significant erosion, the signs can be reasonably reconstructed as **K'IN-**TAHN-na T832-we**. Note the form of the final sign, with its curved bisecting element, so very different from the angular **TE'**-semblant on the much later LACMA vase. Only the **we** sign has this developmental history. Our second example is Yaxchilan Lintel 47 (Figure 13b), dating to AD 526, and here sufficient detail survives to allow certainty as to the identities of all five elements, *K'IN-TAHN-na T832-we*. Note the internal circlets on the curved bisecting element. (Tikal Stela 3 likely featured these as well.) Grube and Nahm (1994:688) interpreted this as T21 **bu**, but this is more likely to be an Early Classic diagnostic of **we**, lost in Late Classic examples, as the **we** sign moved to distinguish

²¹ The **WAY** glyph was deciphered by Houston and Stuart (1989), while a useful compilation of *wahy* beings was provided by Grube and Nahm (1994). The original conception of these beings as "co-essences" of Maya rulers has more recently shifted to take account of their nocturnal and threatening aspects, as well as the rich tradition of nagualism in Mesoamerica (see, e.g., Stuart 2002b:411, 2005; Zender 2004:72-77; Helmke and Nielsen 2009). More recently Zender (in Stone and Zender 2011:233, n.7) has outlined the etymological evidence in support of **wahy* "sorcery, spirit."

²² It might be noted that our concerns about the proposed **BOLAY** reading apply equally to Helmke and Nielsen's (2009:Fig. 2) more recent proposal of **BOL**.

²³ For completists, the three remaining examples are: (1) Xunantunich Stela 1, B1, heavily eroded, ... T832-**we* ...; (2) K1743, some repainting, [**K'IN*]TAHN T832 **u-WAY-*ya*** ?; (3) "Deer-Dragon Vase," *K'IN-ni to/TOK-T832 ba-tz'u u-WAY-ya* ?-TAL-*la* (Robicsek 1978:Fig. 145; Schele 1985:61, Fig. 3).

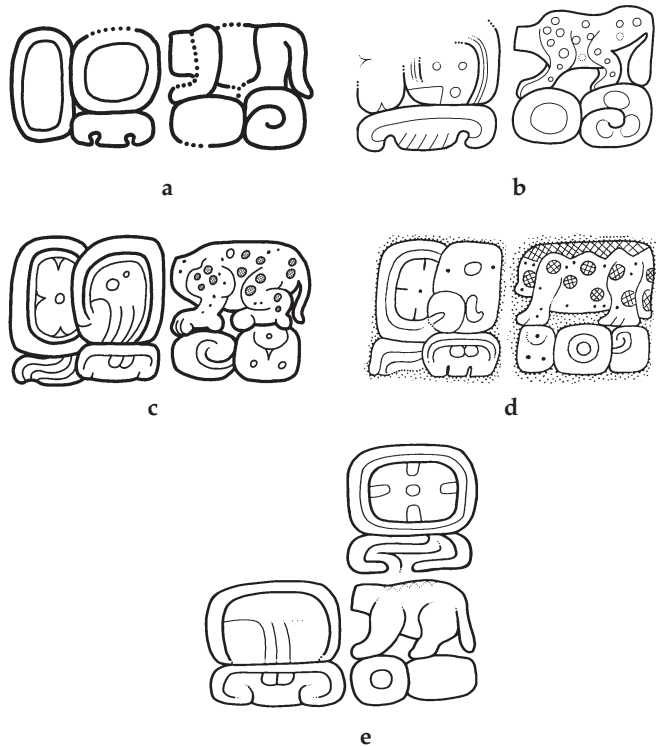


Figure 13. Various spellings of the K'in Tahn K'eweel epithet: (a) *K'IN-**TAHN-na K'EW-we*, Tikal Stela 3, C3-D3, AD 488 (drawing by Marc Zender after William R. Coe in Jones and Satterthwaite 1982:Fig. 4a); (b) *K'IN-TAHN-na K'EW-we*, Yaxchilan Lintel 47, C3-D3, AD 526 (drawing by Marc Zender after Ian Graham, CMHI 3:103); (c) *K'IN-ni-TAHN-na K'EW-we-la*, Palenque Temple of the Sun Tablet, C2-D2, AD 692 (drawing by Marc Zender after a photograph courtesy of Linda Schele); (d) *K'IN-ni-TAHN-na K'EW-we-la*, Yaxchilan Stela 18, front, C1-B2, AD 723 (drawing by Ian Graham, from Martin and Grube 2000:123); (e) *K'IN-ni-TAHN-na K'EW-we(-la?)*, Ek Balam MT 7, B13-B14, ca. AD 785 (drawing by Marc Zender after Alfonso Lacadena in Grube et al. 2003:25).

itself from **bu** (and **mu**) and in so doing came instead to be visually confused with **yu** and then, still later, with **TE'**. Our third example is from Palenque's Tablet of the Sun, dedicated in AD 692 (Figure 13c). Here we can read the sequence as *K'IN-ni-TAHN-na T832-we-la*, and **we** now has the familiar **yu**-like features seen in other Late Classic contexts. However, note the novel **la** syllable infixed into its disc. Yaxchilan Stela 18 is our fourth example, dating to AD 723 (Figure 13d). It is very similar to the Palenque example with one small difference: **la** and **we** appear to have changed places. This may just be an example of playful sign ordering, but it's also possible that the "full form" of **we** is implicated, with **la** merely infixed into its leftmost flange. If so, then the matter is handily explained, since infixed signs can be read either before or after the signs into which they are infixed.

Finally, we come to our fifth example, Ek Balam MT 7 (Figure 13e), an incised bone lancet from the tomb of Ukit Kan Lehk Took', dating to ca. AD 785. Unfortunately, although clearly the same epithet, erosion makes it difficult to confirm whether the **we** sign has here developed the **TE'**-like details seen on Yaxchilan Stela 21 and the LACMA Vase. We include it here only to establish that the **we** sign is also attested in Late Classic northern Yucatán.

Having traced the visual history of the **we** sign in the context of its role as a phonetic complement to the T832 "headless jaguar" sign, we now have more than ample evidence to propose a decipherment for this logogram. Note that Early Classic forms seem to complement T832 with **we** alone, whereas the Late Classic examples feature both **we** and **la**. Recall also the consideration that **Ce** signs tend on the whole to operate as synharmonic complements. This suggests that T832 should be of the form *Cew* (later *Ceweel*), and by far the best candidate is the widely-diffused lowland term **k'eweel* "cuero (leather), piel de animal (pelt)" (Kaufman 2003:375), with cognates including Ch'orti' *k'ewer* "leather, skin, hide" (Hull 2016:231), Itzaj *k'ewel* "hide, skin" (Hofling and Tesucún 1994:390), and Yucatec *k'éevel* "skin, hide, leather" (Bricker et al. 1998:151). A "headless jaguar" seems a reasonable icon for "leather, skin, hide." Incorporating the head of the jaguar may have been confusing, in that it might have connoted the animal itself rather than its handsome pelt. Further, as Stephen Houston (personal communication 2014) usefully suggests to us, a jaguar's skin must have been something of an exemplary pelt, the most valuable of all, and it therefore makes sense that it would have been chosen as the type example for a generic concept. Andrea Stone and Marc Zender have made a similar point about the sign for "tail," noting that:

while the **NEH** sign is a perfectly natural depiction of a jaguar tail, it is at best a highly conventionalized term for tails in general, particularly when employed as a descriptor for the tails of coatis, deer, and monkeys, for instance. As with all hieroglyphic scripts, this decoupling of specific characteristics is unavoidable whenever one seeks to represent a general category, for categories do not actually exist in nature, and one must therefore choose a specific member of the category to represent. (Stone and Zender 2011:205)

Accordingly, we propose that the T832 "headless jaguar" was in fact the logogram for *K'EW* "pelt." Thus, even though *-el* (Ch'orti' *-er*) is not a separable part of the modern terms—e.g., Itzaj *uk'ewelal balum* "jaguar skin" (Hofling and Tesucún 1994:390) and Yucatec *uk'éewlil kéeh* "deerskin" (Bricker et al. 1998:151)—it nonetheless seems likely that this element originated as an inalienable suffix sometime between the late sixth or early seventh century AD (thereby accounting



Figure 14. Tributary scene on an unprovenanced polychrome vase in a private collection (photograph K5062 © Justin Kerr).

for the absence of *-la* in our Early Classic spellings), before becoming fossilized and reinterpreted as part of the root. Note that *-Ce-la* is precisely the spelling we would expect for an early inalienable suffix, before later changes (either to orthography or pronunciation) led to the adoption of synharmonic *-Ce-le*.²⁴ Thus, Classic Maya epigraphy and philology, combined with the results of the comparative method, now allow us to trace the development of this term from Preclassic **q'ew* to Early Classic *k'ew* (in the fifth and sixth centuries) to Late Classic *k'ewel* (in the seventh and eighth centuries) to modern *k'ewel* and *k'ewer*. The historical semantics of this word are less clear, but it would be naïve to believe that it always meant “leather, skin, hide.” As such, it’s interesting to note once again that Maya scribes selected a “jaguar pelt” to represent the lexeme and, as we will shortly see, that its only known script contexts refer to pelts exclusively. This is mind, it might be the case that this term developed from a narrow reference to “animal pelts” in the fifth through eighth centuries, and only later broadened to encompass “leather” more generally, as in Ch’orti’ where (uniquely) *k'ewer* can also mean “whip” and “lasso” (Hull 2016:231).

To return to the caption text associated with our *wahy* being (Figure 12), we can now read it as **K'IN-ni-TAHN-la K'EW-we u-WAY-ya K'UH-ka-KAAN-AJAW*, *k'in tahn k'ewel[u] uwa[h]y k'uh[ul] kaan[ul] ajaw*, “Sun-Chested Pelt is the nagual of the divine Kaanul lord.” The precise sense of “Sun-Chested Pelt” is somewhat elusive, but we need no longer wonder why the

jaguar appears to be deceased and sports the sacrificial scarf. Evidently he is just a jaguar pelt, albeit one with a sunny chest. In other contexts, as we’ve seen, *K'in Tahn K'ewel* appears to have been a venerated epithet of the Sun God, suggesting that animal skins may have had some special relevance for him, perhaps as an item of clothing or a select tribute offering. On the other hand, there are several Colonial Yucatec idioms that might prove relevant to the role of *k'ew* in a deity epithet, such as *k'éewlil báalam* “sabio, prudente, de varios pareceres (wise, prudent, of considered opinion)” and *bay uk'éewelil báalam upuksi'ik'al Juan* “es Juan muy sabio y prudente (John is very wise and prudent)” (Barrera Vásquez et al. 1980:396).

Unfortunately, we do not find *K'EW* in many other contexts, but one welcome exception is a lavish scene of tribute offerings on an unprovenanced vase in a private collection (Figure 14). Here, the Maize God

²⁴ As an example, consider Shell Pendants 15A/15B from Comalcalco Burial Urn 26, where we have the construction: *t'o-xa-ja a-pa-ka-la TAHN-na ti-BAAK-ke-la ... K'INICH-K'AN-to-ko-mo-o*, *t'ol[h]xaj alj] pakal tahn tibaakeel ... k'inich k'an tok mo*, “Aj Pakal Tahn was cut with the bone of ... K'inich K'an Tok Mo” (Zender 2004:259-260, Fig. 75). By contrast, a roughly contemporary spelling on a bone hairpin from Yaxchilan Tomb 2 of Structure 23 instead provides *u-ba ke-le BAHLAM-ma IX k'a-ba-la XOOK-ki*, *ubakel bahlam ix k'abal xook*, “this is the jaguar bone of Lady K'abal Xook” (Stuart 2013). Broadly speaking, however, the spellings with *-la* seem to be earlier than the ones with *-le*.

holds court, sitting cross-legged on his throne inside a palace chamber. He receives four visiting sumptuously attired dignitaries wearing the heads of animals. From left to right, the headdresses seem to represent a stag, a cougar, a mammal of uncertain identity, and a jaguar. Obliging, the man with the hart's headdress receives the caption **chi-ji**, *chi[h]j*, "he's a deer"; but no such courtesy is extended to us for the other three. The dignitaries have apparently brought tribute, including red-lipped containers (between them and the Maize God), narrow-necked vessels (in front of the throne), and baskets of jewelry, just behind the right arm of the Maize God, on which he leans forward to converse. Sadly, there has been some repainting of both the rim text and the inset text describing the scene, yet enough can be gleaned from both to establish that this was a thoroughly legible text before it was touched up. The opening Calendar Round (A1-B1) can't be fully made out, but seems to read in part 11 ? 8 Zip. The verb has also been somewhat retouched, but it and the following glyph (A2-B2) may have intended **yu-UK' chi**, *yuk' chi[h]*, "there was drinking of pulque." Narrow-necked jars of the kind below the maize god would have been appropriate for storing this beverage, and it may be that the animated poses of the delegation reflects their inebriated condition, just as repainting may have obliterated the small, shallow pulque-drinking cups some of them may once have been holding. (In retrospect, it is also possible that the **chi-ji** written above the man to far left is to be interpreted as a cry for more *chih*, or "pulque.") The next four glyphs (A3-B4) are an apparent couplet, 1-PIK K'EW-**we** 1-PIK ?, *juun pi[h]k k'ewel[l] juun pi[h]k ...*, "there are eight thousand pelts (and) eight thousand ...". Unfortunately, a combination of erosion and repainting renders the last glyph block unidentifiable. Almost certainly it represents some other material item of tribute, such as **bu-ku** (*bu[h]k*, "clothing"), **pa-ta** (*pata[n]*, "tribute items"), **u-ha** (*uuh*, "jewelry"), **yu-bu-TE'** (*yubte'*, "tribute mantles"), or something similar.²⁵ In any case, it's intriguing to see *k'ew(el)* "pelts" enumerated as a tribute item, and perhaps noteworthy to see that its primary meaning of "pelt" remains.

Considerations

At this point, we believe that the case for **we** is convincingly made. Further, given the sign's mutability of form during the roughly three hundred years for which it is presently attested (ca. AD 450–750), we trust our apology for this delayed decipherment is both understood and accepted. There remains much to do, inclusive of

²⁵ One of our reviewers suggests **ka-wa** (*ka[ka]w*, "chocolate") but we consider it unlikely. There is a **ka-wa** glyph in the PSS (just above the **chi-ji** caption) and its form and interior details are rather different from what survives in our mystery compound at B4.

scouring the corpus for Early Classic **bu**-semblants, Late Classic **yu**- and **TE'**-semblants, and Terminal Classic **TE'**-semblants in odd contexts, including close and otherwise inexplicable association with **Ce** syllables, or with still-undeciphered logograms (we list several candidates for these below). Regrettably missing are any incontrovertible examples of **we** from the codices, meaning that we still do not know for certain what form (or forms) the sign may have taken in the Late Postclassic. A close search for **TE'**-semblants in the Dresden, Madrid, and Paris codices discloses no standout candidates. Earlier examples, from the Protoclassic and Late Preclassic, are also absent, but this is equally true of many otherwise well-known signs. Yet we may at least hope for these to emerge eventually, since it strains credulity to imagine that **we** was only conjured in the late fifth century.

In the meantime, we have gathered several other potential occurrences of the **we** sign. Sadly, in many of these cases, visual confusion (with **yu**, **TE'**, **bu**, and still other signs), uncertain contexts, unique examples, or damage and repainting have made certainty elusive. Nonetheless, we offer them in the hopes that some of our colleagues can take them further, or at least so that they might serve as a convenient list for annotation and expansion as and when new examples appear.

Yaxchilan Lintel 49

This Early Classic lintel belongs to the famous set of four listing the first ten kings of Yaxchilan, and dating to ca. AD 550. During the reign of the sixth ruler, K'inich Tatbu Jol II, sometime during the first half of the fifth century, he took a captive with the name **ke-?we-le** ?**PECH**, *kewel pech*, "protruding-lipped duck" (C3-D3). The identity and reading of the logogram is uncertain. The Early Classic **we** candidate is practically identical to the **bu** syllable in the name of K'inich Tatbu Jol II (at B8). Still, **ke-bu-le** is not a particularly promising collocation, and Chuj *chew*- v.pos. "to have protruding lips, be lippy" (Hopkins 2012:54) would be a marvellous lexeme to have.

Tikal Altar 5

Following Lady Te' Tuun Kaywak's death (glyphs 10-14) we read that **k'u-ba-ja ti-MRD-?we mu-ka-ja 9-AJAW-NAAH**, *k'u[h]baj ti ...w mu[h]kaj baluun ajaw naah*, "she was put/placed in/with/as ... (and) buried in (the) nine lords house" (glyphs 15-18). There are only six examples of MRD (Macri andLooper 2003:124), which depicts a hand holding a series of stacked objects. Schele and Grube (1994:2) argue that the objects represent "flints or obsidians," yet we note that they carry the "rough/wrinkly texture" marker which labels the skin of crocodiles, cacao pods, dried leaves, and testicles (Houston et al. 2006:16). The Tikal context is

unique in providing MRD with a final phonetic complement (see Jones and Satterthwaite 1982:Fig. 23 glyph 16, Fig. 94c), which suggests the value **CEW**. One candidate would be Ch'ol *p'ew* vt. "augmentar (to increase, add to)" (Aulie and Aulie 1998:171). The presence of /p'/ in Classic times is still debatable (see Wichmann 2006), but Kaufman and Norman (1984:85) note that "[s]ome instances of /p'/ come from earlier /b'/, some from /p'/," so this verb may have appeared as *bew* or *pew* if /p'/ was not present. Other contexts of MRD include: (1) the Houston Panel, F5, **u-MRD**, and note texture marker (Mayer 1984:Pl. 26-27; www.wayeb.org/drawings/col_houston_panel.png); (2) the Regal Rabbit Pot, K1398, C8-D9, **a-ni u-MRD yi-bi k'e-se**; (3) K4930, A2, **MRD-ja**; (4) El Peru Stela 44 (Stanley Guenter, personal communication 2015), and; (5) Ek Balam MT 7, B5 (Grube et al. 2003:25).

St. Louis Art Museum Column Altar

This unprovenanced monument contains the name of a Bonampak ruler written 'EDZNAB'-'-**we**, of unclear transcription (see Martin and Grube 2000:184). The **we** sign here is the typical Late Classic form common in **che-le-we** spellings at Yaxchilan, and although the preceding sign looks somewhat like **cho**, there are some visual differences, and **cho-we** would make for an awkward grouping.

Tonina Fragment p2

This unpublished Late Classic monument fragment contains two full glyph blocks and three partial ones, and the context is therefore more than a little unclear. Nonetheless, we apparently have **we-le-AJAW**, *we(h)l ajaw*, "Lord of We(h)l." The **le** variant is the rare T752 "licking dog" sign, of which we only have four other examples.²⁶ Unfortunately, there is indifferent semantic control here and numerous candidate lexemes, including Ch'olan *wehl* "fan" and Yucatec *wel* "a species of small mosquito."

K1398 (The Regal Rabbit Pot)

In God L's pathetic plea to the Sun God, he apparently states of the rabbit that **u-CH'AM-wa ni-?we-ha ni-bu-ku ni-pa-ta**, *uch'amaw niweha[l] nibu[h]k nipata[n]*, "he took my teeth(?), my clothes, (and) my tribute offerings." Although it's not evident that the rabbit has snatched the chapfallen old god's teeth, it is intriguing to connect this to the mythical comeuppance of Seven Macaw in the Popol Vuh, who has his bejeweled teeth knocked out by the Hero Twins. Yet we are compelled to note that, rather than **we**, this sign might instead represent an undeciphered 'jewel' sign (e.g., in X3 of the supplementary series).

K1941

Glyphs 9-11 of this Xultun-style black background vase name a royal woman of Tikal: **IX-K'AN-na AHK-?-T594-?we**, *ix k'an ahk ...ew*, "Lady K'an Ahk (Ce)Cew." This would be the "full form" of **we** previously seen on CLK 51, and it must be admitted that it is completely equivalent to two nearby **yu** signs (at 6 and 7). But Yaxchilan Lintel 23 (E2) also seems to provide a **we** phonetic complement to T594. Otherwise, the sign is best known from its appearance in the name of the Palenque patron god GIII, where it usually takes **-wa** (e.g., PAL T.21 bench) but not in all instances (e.g., PAL T.I., Center, E7), suggesting that it is a logogram terminating in **-w**. If we are correct about the contexts with **-we**, then the synharmonic rule suggests that it should in fact have the shape (CE)CEW. Given that the sign seems to depict an item woven from reeds, two candidates might be Ch'ol *sew(al)* "red de tejido para llevar pozol" (Hopkins et al. 2011:204) and Ch'olan *ch'ehew* "cup, bowl, plate, dish (of any material)" (cf. Ch'ol *ch'ejew*, Aulie and Aulie 1998:28; Ch'orti' *ch'e'w*, Hull 2016:120).²⁷

K8017

This magnificent incised vessel from the Xcalumkin region of northern Yucatán contains an odd **?we-HEADLESS.MAN-?ne** spelling, where the medial sign is likely to be a rare and uncataloged logogram. Once again, the **we** would be a "full form" and is identical to two **yu** syllables on the same vase. A second example can be found on Xcalumkin Column 1, A3 (Lacadena 1995:86, Fig. 2.30), once more written **?we-HEADLESS.MAN-?ne**, and with the same striking similarity to a nearby **yu** sign (at A2).

²⁶ For T752, Thompson (1962:340) notes that his examples are "[a] menagerie which may contain more than one genus." Indeed, his second example is the **ji** rodent (TIK St 31, F7b), his sixth is either **OOK** or **TZ'I'** (PAL T.I. West, J3), and his eighth is **BAHLAM** (CRC St 16, B19). Only Thompson's seventh example (PAL T.I. East, K11) matches the type illustration, which is a dog with its tongue hanging out. Its value as **le** is certain given the context (**CHUM-wa-ni-ya ta-AJAW-le**), as is also true of two **che-le-we** spellings (the previously seen YAX St. 4, Fragment G, and YAX St. 24, front, pD1). Guido Krempel's (2015) addition of Tzocchen Miscellaneous Sculpture 1 to this list is a welcome one, and we also concur with him that the **le** value probably reflects acrophony from a root meaning "to lick." But rather than Yukatec *letz'* (his suggestion), we propose Proto-Ch'olan **lek'* "to lick" (Kaufman and Norman 1984:124 item 284) as the more likely source, particularly given that the earliest appearances of this sign are in Chiapas. Similarly, the rarity and exclusively Classic contexts of T752 make it unlikely that it served as the source of T188 **le** (pace Krempel 2015:5).

²⁷ If these observations are correct, then Christian Prager's recent proposal of **BAL** "to hide, guard, cover" for T594 is incorrect (Prager and Braswell 2016:271).

Conclusions

Although still inconclusive, we feel that several of the above contexts are promising, and it is quite likely that other examples of **we** remain to be identified, so intertwined is its visual history with **bu**, **yu**, and **TE'**.

Our identification of the **we** syllable has shed considerable light on several aspects of Maya writing. From a lexical point of view, the new reading establishes the presence during the Classic period of the words *k'ew* (later *k'eweel*) "pelt" and *we(ˀ)bnaal* "altar." And it has helped to clarify the precise grammatical roles and semantic range of several others, such as *chel* "to space or place evenly, spread out, fill," *eb* "to send / deliver, give," and *tek'* "to step on, stand upon, kick." From the perspective of decipherment, the new sign appears as a phonetic complement to at least four different logograms, providing a reasonably secure reading for one of them, T832 **K'EW** "pelt," and important phonetic information which should assist in the eventual decipherment of three others (T594, MRD, and the 'headless man'). With respect to script orthography, the **we** syllable provides welcome new data relevant to the precise nature of the relationship between vowel complexity and harmonic / disharmonic spellings (Houston et al. 2004; Lacadena and Wichmann 2004; Robertson et al. 2007), and it has permitted a useful test and extrapolation of David Stuart's (2002a, 2008) orthographic principle that syllables of the shape **Ce** (and **Co**)—being generally outside the framework of the **Ci**, **Ca**, and **Cu** signs employed to indicate vowel complexity—consistently spell lexical roots synharmonically. Grammatically speaking, a sign for **we** also has important implications for the phonetic shape and historical development of two significant grammatical suffixes. The Classic Ch'olti'an CVC-root transitive declarative suffix has been reconstructed as $-V_1w$, $-VV_1w$, and $-V_1'w$, and while we cannot fully resolve this, recognition of the **we** sign reveals several late synharmonic contexts (e.g., *yebew*, *utek'ew*, *uCabaw*) where $-V_1w$ is surely indicated, suggesting loss of an earlier long vowel during the eighth century (Houston et al. 2004). Similarly, the $-VV_1w$ (later $-V_1w$) antipassive suffix of CVC-root transitives (Lacadena 2000 and Zender 2010:13) here receives additional support in the form of *chelew*, *tiliw*, and *jolow*. Last, but by no means least, the **we** decipherment provides interesting historical sociolinguistic information, such as that part of the pre-accession name of Yaxchilan's Itzamnaaj Bahlam IV apparently developed from *cheleew* to *chelew* in the capital during the late eighth century, and that client sites did not all take up the new, presumably prestigious pronunciation (or orthographic innovation) at the same time. It is suggested that closer attention to such variable linguistic features in Classic Maya texts stands to reveal much about not only linguistic history, but the sociopolitical networks which influenced language change.

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